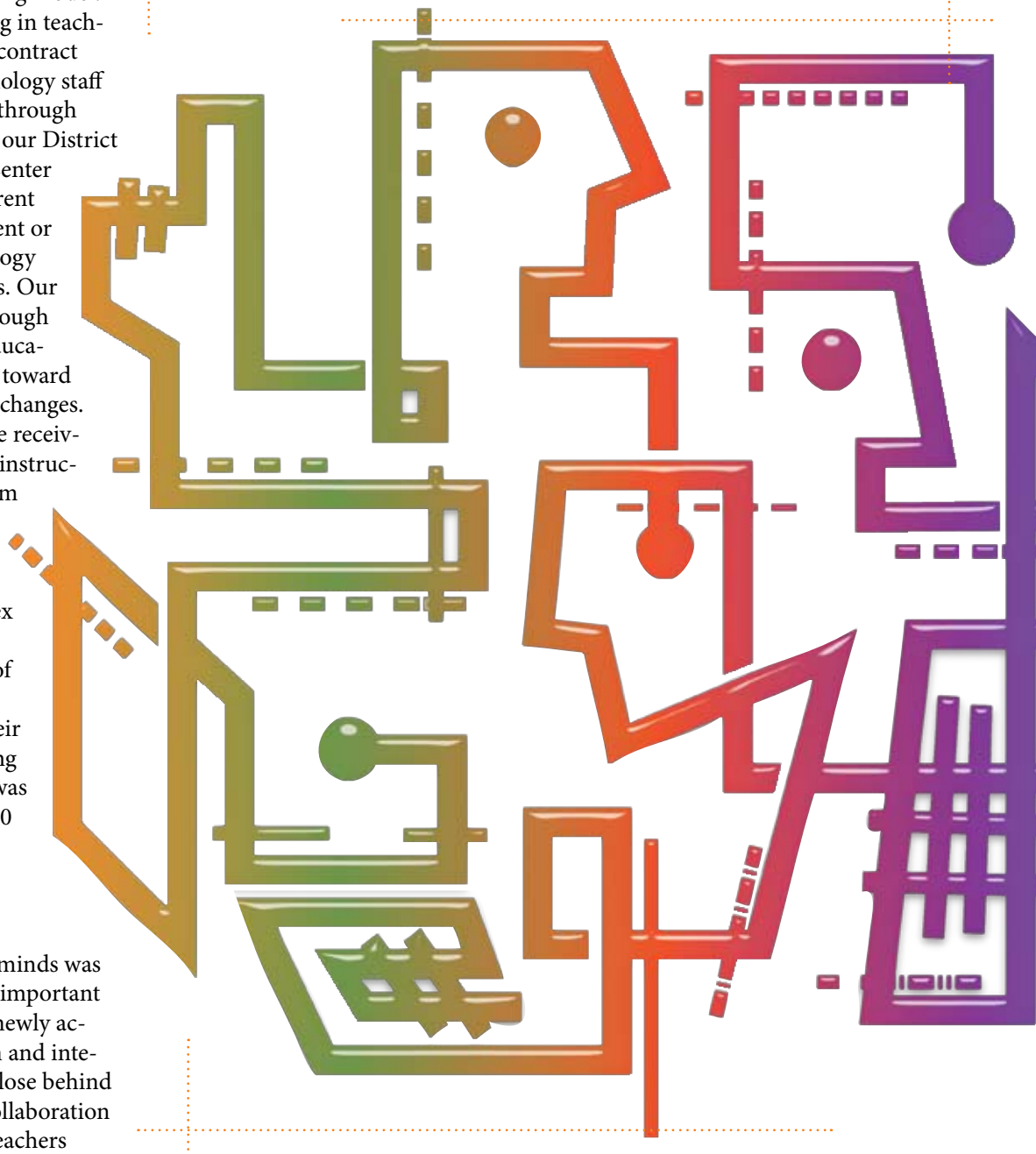
Hands-On and Online

By Roger Martin and Dianne Smith

Adding an online component to a teacher training program helps increase participation and engagement.



We liked our training model. We were bringing in teachers during their contract time for a full day of technology staff development. We offered, through one of two training labs at our District Educational Technology Center (ETC), more than 30 different courses on skill development or how to implement technology into instructional practices. Our courses were approved through the Utah State Office of Education (USOE) for 0.5 credit toward re-licensure or salary lane changes. In each class, teachers were receiving 7.5 hours of hands-on instruction. Our classes range from introductory level, such as basic word processing (how to use or how to integrate), to more complex programs such as Dreamweaver or ArcView. Each of our 76 schools received 20 paid substitute days for their teachers. Although equaling only 1,520 days, the ETC was training an average of 2,400 individuals per year. What was not to like?

Improving Implementation

Always in the back of our minds was the understanding of how important immediate application of newly acquired skills is to retention and integration of new material. Close behind timely use of skills were collaboration and follow-up. We knew teachers found success more quickly when receiving feedback and help as they integrated technology in their instructional practice than when left to their own resources.

As we explored the tools and resources, we found the realistic solutions we had been seeking. We created what was for us a new training model.

There was a growing realization that implementation of the newly acquired skills was not happening due to lack of teacher time and no course requirement to do so. During class introductions, for example, teachers would sometimes acknowledge the class was a repeat for them because they hadn't used the skills learned in a previous training. Our justification for not implementing projects and the needed feedback was primarily lack of instructor time. We could not see how we could possibly provide feedback and follow-up for the large number of individuals attending our classes. Besides, this was technology. Isn't that how everyone conducts technology training?

No Child Left Behind (NCLB) changed everything for us. We'll never forget the statement by our assistant superintendent of curriculum, Dr. Nancy Fleming. She said that "even with all its problems, NCLB will make us better." For the ETC, that statement proved prophetic. Although we struggled in staff meetings to find a better way to conduct our training, we received a major push from the USOE. The USOE strictly implemented the NCLB staff development requirements and changed how they granted credit. Teachers could no longer receive 0.5 credit for one-day courses. A minimum of 1.0 credit would now be given for 14 or more hours of direct instructional time. This was in addition to seven other criteria:

- Does the course include follow-up activities to ensure understanding and promote sustained professional improvement?
- Is the course aligned with or designed to support the core curriculum (Davis Essential Skills and Knowledge standards)?
- Does the course content address a determined need based on school data and student assessments?
- Will the course improve teachers' knowledge of subject area content and/or effective teaching practices?
- Does the course address a specific need as identified in the district's, school's, or teacher's improvement plans?
- Will the course advance teacher understanding of effective, research-based instructional strategies?
- Does the course align with the teaching standards found in the Davis School District's Comprehensive Professional Development Plan?

Now there was a challenge! We could not double our already stretched budget. We could expand our course content, but teachers would find it difficult to be away from the classroom for two days. It was a high priority for us to continue providing credit for teachers attending our classes. We were already meeting most of the NCLB criteria. Realistically, how could we meet the new sufficient duration requirements, include follow-up activities, and provide feedback for so many teachers? We needed something new.

We continued to struggle with ways of improving our staff development. Two of the ETC instructors had become facilitators for the new PBS TeacherLine program. TeacherLine delivers curricular workshops completely online, using a course management program called Blackboard. One day, in a staff meeting, while discussing Blackboard, a light turned on. Why couldn't we use the tools in Blackboard, tools with which two of our instructors were already familiar? That single moment launched an avalanche of ideas from the entire ETC staff. As we explored the tools and resources, we found the realistic solutions we had been seeking. We created what was for us a new training model.

Improving Delivery

Our new model has allowed us to continue training at almost our normal pace. We have included the research-based, high-quality staff development components we were lacking:

- Blackboard's Discussion Board facilitates necessary collaboration and follow-up.
- The Digital Drop Box provides the means for collecting completed curricular projects—proof that the newly acquired skills were implemented in a timely manner.
- The Testing Tool offers a way for teachers to submit a "Reflective Response," explaining the project's classroom outcomes.
- The Gradebook allows participants to see that they have received credit.

To accomplish all of these additions, each class remains "open" for four weeks. To receive credit, teachers must complete the following requirements during this time and according to a course rubric:

- Participate in all 7.5 hours of training in one of the ETC labs.
- In the four weeks following the class, participate weekly in an online discussion board with other class members.
- Submit a curriculum-based project that incorporates the training.
- Upon completion of the project, submit an online reflective response. In addition to answering questions regarding what he or she learned, teachers must describe which of ISTE's National Educational Technology Standards (NETS) for Students or Teachers are being met through the implementation of their project.

(***Editor's note:*** Find sample rubrics for two of Davis School District's courses online at http://www.iste.org/LL/.)

But what would teachers think? How would teachers react to these new, more stringent requirements?

We began laying the foundation of our rollout during the spring and summer courses before our fall implementation. We explained to each class what the new requirements were going to be. We did not receive the expected negative feedback. In most cases, teachers were positive, realizing the new requirements added needed support, follow-up, and help with implementation. The following quotes from two teachers on the online discussion board best reflect the feelings of many teachers since the implementation of the new requirements:

> This new approach adds the missing piece to the training you have been providing all along.
>
> Additionally, the assigned project forced me to make the time and energy to produce an activity. Otherwise, I may not have done so or at least not as quickly. I am grateful for the encouragement and motivation that it provided.

Reviewing Results

The results of our new training model have surpassed even our highest expectations. Teachers love the discussion board. They now have an avenue to ask questions, receive timely answers, and share their success stories. Many times, before the instructors can answer posted questions, other class members have already responded. Teachers no longer feel they are "out there on their own." There are cases in which we offer classes that do not provide credit. For these, when teachers realize there is no Blackboard component, they request that the discussion board be set up anyway!

The instructors are managing the increased workload by receiving copies of completed projects through Blackboard's Digital Drop Box. Teachers receive the all-important feedback on what they have accomplished based on the project rubric. Even classes that would not seem conducive to the production of a project have yielded surprising results. One teacher, for an introductory Windows XP class, submitted screen captures from her computer showing her use of the operating system and file management strategies used with students. Teachers complete the reflection paper through the privacy of the testing tool, using the short answer feature. Many teachers, however, share their feelings about what they have learned through the discussion board. This type of collaboration goes above and beyond the course requirements. Teachers really are interested in sharing the highs and lows with each other.

An added benefit to this process is an ever-growing collection of teacher-produced curricular projects. The projects are indicative of the advancing literacy of teachers who often piggyback skills learned in one class to complete a project for another. These projects demonstrate an effective, creative use of technology as an instructional tool, which is improving teaching and learning in our classrooms.

The following figures illustrate our "realistically doable" training workload using Blackboard tools. A combined total of 198 classes for both ETC labs were taught between July 1, 2003, and June 30, 2004. The number of classes taught for July 1, 2004, through June 30, 2005, totaled 220.

As expected, not all teachers complete the requirements to receive credit for classes they attend at the ETC. We were, however, excited to see that the number of teachers receiving credit for classes actually increased. Table 1 provides a summary of teacher credit for September through April of our first year and from July through June for our second year.

Many of our "customized" training days do not include an option for credit. Although the number of individuals trained remained within our expected range, the number of classes we taught for credit decreased slightly. This was due to instructor workload for credit classes. After two years, we foresee that our instructors will be able to sustain the current number of classes.

Assessing Costs, Benefits

Sounds too good to be true, doesn't it? Can this model of effective staff development for technology be duplicated? Yes, it can! The cost of implementing this program is the cost of Blackboard, or whichever course management program you select. Blackboard cost $7,500 per year our first two years and will increase to $9,000 next year. We dedicate approximately $95,000 of our Title IID funds to cover substitutes per year. The rest of the costs cover intangibles, such as instructor

Table 1. Teacher Credit Received

	Sept. 2003–April 2004	June 2004–July 2005
Number taking classes where credit was offered	816	1,490
Number who requested credit	770	1,290
Number who met requirements and received credit	661	1,010
Number who did not receive credit	155	280
Percent who received credit for all classes providing credit	81%	78%

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time for project evaluation, discussion board participation, and contact with individual teachers. To date, the instructors have been able to handle the increased requirements with just a slight drop in the number of classes we teach.

We feel strongly that our new model of instruction can be replicated in many districts that have a strong commitment to technology staff development. Our instructors feel energized and are confident the current levels of instruction are sustainable. Our teachers, as teachers always do, are embracing the new model with vigor.

As we reflect on the success of our new training model, we have a hard time concluding which is most important—the opportunity for instructors and teachers to discuss and collaborate with one another or the almost immediate development and implementation of a technology-enhanced lesson. Teachers do not feel alone and are receiving encouragement and very timely help when they are "stuck," well before frustration begins to set in. From these discussions and project development, the instructors gain valuable insights, which in turn lead to adjustments in their instruction. Without a doubt, the addition of an online component to our staff development courses has advanced literacy and built confidence in the use of technology with our teachers as much as any other element of our training.

Resources

Blackboard: http://www.blackboard.com
ETC: http://www.davis.k12.ut.us/district/etc
NETS: http://www.iste.org/nets

Roger Martin, Director of the Educational Technology Center, was a high school teacher for 15 years. For the past 13 years, Roger has worked at the district level, helping teachers integrate technology into their instructional practices as he did in his classroom.

Dianne Smith, now retired, is a former elementary classroom teacher and instructional specialist at the Davis School District Educational Technology Center in Farmington, Utah. For nine years, Dianne worked with teachers at the ETC during their contract time teaching and sharing how technology transforms the classroom with amazing outcomes.